

Power Point Presentation



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Environmental Permits and Support



Regulates the management methods of oil and gas waste treatment and disposal, at or near the land surface. All handling, storage, treatment, recycling, and disposal methods, other than injection wells.

Environmental Permits and Support is one of four sections under the Oil and Gas Technical Permitting division. We regulate the management methods of oil and gas waste treatment and disposal, at or near the land surface. All handling, storage, treatment, recycling, and disposal methods, other than injection wells, are managed by Environmental Permits and Support.

Topics for Discussion



- Waste Hauler Permits
- Recycling of Domestic Wastewater
- Hydrostatic Test (HT) Discharge
- Landspreading
- Authorized Recycling
- Pits

Waste Hauler Permits



Waste Hauler Permits

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Anyone who transports non-hazardous oil and gas waste in the state of Texas needs a waste hauler permit. To obtain a WHP, you will first need an active P5. You can contact the P5 department to get this process started.

You will then need to submit a WH-1, WH-2 and WH-3, which can be found on our website, and the \$250 application fee. The WHP will have to be renewed annually with the submittal of the WH-1 and \$250 fee. This is in addition to the annual operator number renewal by the P5 department.

Form WH-1 (1 of 2)



The WH-1 must include:

- Operator Name and Address
- P-5 Organization Number
- RRC Districts you will be transporting waste
- RRC Districts where trailers will be housed
- Make sure there is an original signature, digital/e-signatures Not accepted

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The Operator name and address should match what is on file with the P5 Department A list of the RRC districts may be found on our website. Please include ALL districts that you will be transporting waste in

If there are multiple districts that your trailers will be housed in, please designate a primary district. If you are from out of state, please indicate as such.

	orm WH-1 (<i>,</i>	
RAILROAD COMMISSION OF TEXAS Oil and Gas Division Environment Permits P.O. Box 12967 Austin, TX 78711-2967	APPLICATION FOR OI WASTE HAULER'S	- / 1112 - 0/ 10	WH-1 Rev 4/94 WWW-1
TYPE OR PRINT US	ING BLACK OR BLUE INK	READ INSTRU	CTIONS BELOW
Organization Report, including cify 4. Number designation of all Railroad where the hauler will pick up, trans	Commission districts 5. Number of	3. Purpose of filing	permit no. ommission districts
that the data and facts stated herein are true, c	to make this application, that this application was porrect, and complete to the best of my knowledge. It the State of Texas Franchise Tax or exempt from o	If the above-named hauler is a corp	
Signature	Name (type or	print)	
Title	Phone	Date	

Box 4 - list all the RRC districts that you will be transporting waste in, you can find a copy of the district map on our website. Box 5 - will be the district you will be housing your trailers. If you are out of state, please indicate so and from which state. All our forms require original signatures.

Form WH-2 (1 of 2)



- WH-2 must include:
 - Operator Name
 - WHP Permit Number
 - Vehicle information
 - Make/Model/Year of Vehicle
 - Serial/Vin Number
 - Capacity/Units
 - License Plates
 - Original signature

Reminder: We do **Not** permit the trucks that haul the trailers

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"For the purposes of this form, 'vehicle' means any truck tank, trailer tank, vacuum tank, dump truck, garbage truck or other containers in which oil and gas waste will be hauled by the oil and gas waste hauler". We do not permit the trucks that haul the trailers, only what is holding/storing the waste.

- Capacity/Units
 - · Accepted units: barrels, drums, tons, or cubic yards
- License plates
 - We do **Not** accept temporary plates

RAILROAD COMMISSION OF TEXAS Oil and Gas Division Environmental Services P.O. Box 12967 Austin, Texas 78711-2967	 GAS WASTE IST OF VEHICLES		WH-2 Rev. 4,94
 with the WH-1 for new permit applications, or NOTE: For the purposes of this form, "vehicle" means at the oil and gas waste hauler. Hauler name (exactly as shown on P-5 organization rep 	cuum tank, dump truck, garbage truck, q		
Vehicle Make/Model/Year	Serial No.	Capacity (units)	Current Vehicle License No

For the WHP the model of the trailer is the type of container the waste is hauled in, ie tank truck, trailer tank, vacuum tanks, dump truck.

Form WH-3



- The WH-3 must be submitted by the Waste Hauler Operator
- Items 1-4 are to be completed by the Waste Hauler Operator
- Items 5-10 are to be completed by the System Operator (the disposal well/facility)
 - Waste Hauler Operator must be permitted in same district as facility

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The System Operator is the permitted disposal facility. The WH-3 must be submitted by the WHP operator, not the facility.

Form WH-3 Items 1-4 (1 of 2)



Items 1-4 are to be completed by the **Waste Hauler Operator** and include:

- The Waste Hauler Operator Name
- The Waste Hauler Operator P-5 Number
- The Waste Hauler Permit Number
- The Waste Hauler Address as filed with the P-5 Department

Form WH-3 Ite	ms 1-4	(2 of 2)	
RALROAD COMMISSION OF TEXAS OIL AND GAS WASTE H Oil and Gas Division Environmental Services P.O. Eox 12967 Austin, Texas 78711-2967 INJECTION	ED DISPOSAL/	WH-3 Rev. 4/94	
TYPE OR PRINT USING BLACK OR DARK BLUE INK		READ INSTRUCTIONS ON BACK	
To be completed by the hauler (1-4) Hauler name (as shown on WH-1 Application for Oil and Gas Waste Hauler's Permit)	2. Hauler P-5 organization no.	3. Hauler permit no., if assigned	
Hauler address (including city, state, and zip code)			
II. To be completed by the system operator (5-10)			

This portion is filed out by the waste hauler

Form WH-3 Items 5-10 (1 of 2)



Items 5-10 are to be completed by the **System Operator** and include:

- The System Operator Name as shown on their P-5
- The System Operator P-5 Number
- The System Operator Address as filed with the P-5 Department
- The Disposal/Injection Well Information
- The Disposal/Systems/Facility Information
- · Must be signed by System Operator

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#8: Disposal/Injection Wells Information

 RRC District, Field/Lease Name, Oil Lease or Gas ID Number, Well Number, UIC Control Number

If a well is **Non-Commercial** the following statement must be provided:

"(Waste Hauler), we understand that (System Operator) who owns and operates the following disposal, which is a non-commercial disposal site and only waste originating from (System Operator) wells will be hauled and disposal of in these disposals: (include Well Field/Lease Name, Well Number, and UIC Control Number)"

#9: Disposal Systems/Facilities

 RRC District, Facility Name and County, RRC assigned Permit Number, Indicate what type of facility

ngered/Injectice Walls. Mentify exactly as shown on H-10 Annual Disposal/injection Well Monitoring Report. Field Manne Out Leave Manne Well Centrel more of Grant ID No. No. 10
Field Name Dil Lease UIC Check On or Well Central non-cone or
or Well Centrel non-com- c
ther Disposal Systems. Identify exactly as shown on system's Commission-granted permit.
t. Facility Name and County RRC-Assigned Permit No. Type of System
Land Farm Pit Land
Land Farm Pit Land
Other (Specify
Land Farm Pit Land

This portion is filed out by the system operator also known as the operator of the disposal facility. Please remember haulers are only permitted to dispose of waste in districts they are permitted in.

Waste Hauler FAQ (1 or 3)



- How much is the fee for a WHP?
- The fee is \$250 for an initial permit, renewal or a name change
- Make checks or money orders payable to:
 - Railroad Commission of Texas
- Credit card payments call 512-463-6882
- To amend the WH-2 or WH-3 (add/remove trailers or disposal sites) no fee is required

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To add trailers or disposal sites no fee is necessary. Payment is only required for an initial permit, renewal or a name change.

Waste Hauler FAQ (2 of 3)



- What forms are required to issue a WHP?
- WH-1
- WH-2, with at least one trailer having an original license plate.
- WH-3, Must also be filed unless disposing at a disposal operating under a minor permit issued by the commission or disposing of the waste out of state.

Waste Hauler FAQ (3 of 3)



- Must I renew my P5 and WHP annually?
- The Organization report (Form P-5) and WHP both require annual renewals.
- These are two separate processes handled by different sections. Please mail applications separately as the applications are processed by different sections.

Waste Hauler Conclusion



For Waste Hauler Questions

- Jason Hollinger
 - Jason.Hollinger@rrc.texas.gov
 - -512-463-7371
- · Waste Hauler email
 - waste_haulers_permit@rrc.texas.gov

Recycling of Domestic Wastewater

Recycling of Domestic Wastewater

Intro to Domestic Wastewater



Recycle treated domestic wastewater/waste streams generated from mobile drinking water treatment systems

Waste streams include

- Treated domestic wastewater
- Mobile drinking water treatment system wastewater

Two recycling options

- Down-hole operations
- Surface application

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What is mobile drinking water treatment system wastewater?

• This is waste from the unit (example: reverse osmosis reject water)

The two options for Surface Application are Controlled Irrigation or Dust Suppression

Down-hole operations criteria:

Biological Oxygen Demand (BOD5) / (CBOD5)* ≤ 80 (mg/l)
Escherichia coli (E-Coli) ≤ 800 CFU/100 milliliters (ml)
Chlorine Residual (>7 day storage) 2 - 3 (mg/l) (EPA Method 334.0 or equivalent)
pH (EPA Method 9045C or equivalent field method) 6.0 - 9.0 (SU)
*Carbonaceous Biological/Biochemical Oxygen Demand (CBOD5) may be substituted for BOD5

Surface Application Criteria:

Biological Oxygen Demand (BOD5) / (CBOD5)* \leq 65 (mg/l) Escherichia coli (E-Coli) "Dust Suppression" \leq 200 CFU/100 (ml) Escherichia coli (E-Coli) "Controlled Irrigation" \leq 75 CFU/100 (ml) Oil & Grease (EPA Method 1664) \leq 30 (mg/l) pH (EPA Method 9045C or equivalent field method) 6.0 - 9.0 (SU) Total Chlorides (or site-specific background for surficial aquifer) \leq 1,500 (mg/l) Chlorine Residual (>7 day storage) 2 - 3 (mg/l)

Domestic Wastewater (1 of 3)



- Permits are valid for 60 days
- There is a one-time extension
- Domestic Wastewater Application Worksheet found on RRC website
- We do not permit anything more than 60 days prior to start of treatment

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The extension is valid for an additional **60 days** which brings the total length of time to 120 days. **Anything more than that will require a new application.**

Domestic Wastewater (2 or 3)



Filling out the Domestic Wastewater Application Worksheet:

- Operator Name, P5 Number, and Address
- RRC District and County
- Field and Lease Names
- Well Number(s) and Drilling Permit Number(s)
- Latitude/Longitude in Decimal Degrees
- Name of Contractor providing treatment services AND unit number of the trailer

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If there are multiple wells on the same pad, include them on one application. Something new that we are requiring is the unit number of the trailer for the Service Operator who will be providing treatment services generating the wastewater and should have a trailer with a unique identifying number. Please include this information on the application; either in the "Name of Contractor Providing the Treatment Services" or the "Additional or Complimentary Technical Information" boxes.

If the unit number is unavailable at the time of application submittal, please include it with the treatment notification as required by Permit Condition 2.

Another thing we are requiring is email notification of when treatments begin and end. This is required so that RRC inspectors can visit treatment locations.

Domestic Wastewater (3 of 3)



Filling out the Domestic Wastewater Application Worksheet:

- Type of waste stream, estimated volume of waste received, and estimated treated effluent volume
- Indicate the storage method of wastewater before recycling
- The re-use method of wastewater after treatment
- Precautions taken to minimize exposure to the waste
- · Estimated time frame

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The daily estimated volume of waste must not exceed 5,000 gallons/day

Two types of storage methods:

- Lined Pit- provide linear material and thickness, manufacturers' specifications, capacity\, berms; linear permeability must be less than or equal to 1x10⁻⁷ cm/s
- Above-ground tank- provide tank material, tank volume, tank pad, berms

Three types of re-use methods after treatment

- Down-hole application
- · Controlled irrigation
- Dust suppressant

If using controlled irrigation or dust suppressant, proof of surface owner notice and agreement **must** be attached to the application

Domestic Wastewater Conclusion 🚱



Submit applications and copies of the drilling permits to domestic.wastewater@rrc.texas.gov

For Recycling of Domestic Wastewater **Questions**

- Environmental Permits and Support
 - -512-463-3840

Hydrostatic Test (HT) Discharge



Hydrostatic Test (HT) Discharge

Intro to HT Discharges (1 of 2)



A Minor Permit to Discharge HT Water is required if:

 The wastewater resulting from the hydrostatic testing of natural gas, crude oil, or other pipelines or tanks or other vessels under jurisdiction of the RRC when discharged to land surface

A Minor Permit to Discharge HT Water is Not required if:

 The hydrostatic test water will be disposed in an authorized manner other than discharge

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Anyone who plans to discharge wastewater resulting from the hydrostatic testing of pipelines, tanks or other vessels under jurisdiction of the Commission will need to apply for a minor permit to discharge hydrostatic test water. The other vessels could include meter stations, compressor stations, fractionation plants, or even pig launchers.

Examples of an "authorized manner" include RRC permitted injection wells or aboveground disposal facilities.

Intro to HT Discharges (2 of 2)



If **All** the following are met, a permit is **Not** required:

- · New gathering line
- Quality water source (potable or irrigation well)
- Discharge volume is less than 10,000 gallons
- Discharge is in the right-of-way and the surface owner does not object

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To discharge without a permit, the operator must meet all requirements. If all these requirements are met, then the activity is considered on-lease land application and would not require a permit.

HT Application (1 of 2)



File the application with Technical Permitting in Austin

Only complete applications will be accepted

If the discharge is to Surface Water

 If HT wastewater will reach surface water, you must apply for a discharge permit from the Texas Commission for Environmental Quality (TCEQ). Please visit the TCEQ website for information about Oil and Gas Wastewater

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The application attachments include topographic map clearly depicting the pipeline or tank, the fill point, the discharge point, and the nearest body of surface water. If the discharged water will reach surface waters of the State, show the route of flow of the test water from the discharge point to the nearest body of surface water. Additionally, a non-topographic aerial view of the discharge point is helpful for RRC staff.

More information can be found here: https://www.tceq.texas.gov/permitting/wastewater/general/TXG67_AIR.html

HT Application (2 of 2)



The HT Application must:

- Use the Operator Name and Address as filed with the P-5 Department
- Include the P-5 Organization Number
- · Include an original signature

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Applications may be sent electronically, but a subsequent hard copy of the application, must be sent to Technical Permitting.

HT Application Review



Administrative Review

- The first 15 days of review are Administrative only
- Technical Permitting will communicate all application deficiencies to the operator during this time
- Most permits are issued within 30 days

HT Permit Issuance



The Permit is valid for sixty days

May be extended upon operator's request

The Permit will include sampling and/or reporting requirements if:

- The volume of discharge is over 100,000 gallons
- Use of a temporary wastewater storage system, such as frac tanks (regardless of the volume of the discharge)

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Each frac tank that is discharged out of must have a sample taken from the discharge valve. To ensure compliance, each frac tank should be cleaned before filled with the wastewater.

The permit is for sixty days, we will extend it, but the extension request must be received by the RRC before the expiration date so that there will be no break in permit coverage.

We will extend a permit up to three times. There could be up to eight months of coverage from a single permit. After the third extension, if more time to discharge is needed, a new application will be required.

HT Analytical Report

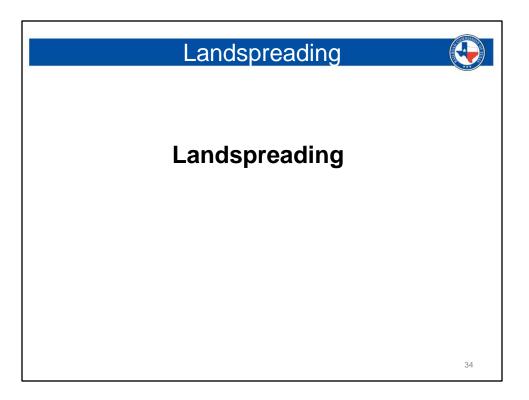


The discharge effluent must be tested for and meet the criteria specified in the table below

<u>PARAMETER</u>	<u>LIMITATIONS</u>
Benzene	0.5 mg/L
Oil & Grease	15 mg/L
Chemical Oxygen Demand	Report
Electrical Conductivity	Report
Total Suspended Solids	Report

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These are the constituents that must be sampled for if the discharge is over 100,000 gallons, if testing a used pipeline or tank, or if temporary wastewater storage systems are used, like a frac tank or vac truck, after the hydrostatic test but before the discharge.



Introduction to Landspreading



Landspreading

Treatment and disposal of low-toxicity wastes in which wastes are spread and mixed into the soils to promote reduction of organic constituents and dilution and attenuation of metals.

Permit Types

- Land Apply
- Landfarm
- Landtreatment



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Landspreading Information: https://www.rrc.texas.gov/oil-and-gas/applications-and-permits/environmental-permit-types/landfarming-landtreatment-and-land-application-facilities/

Landspreading Factors



Landspreading Factors:

- Berms surrounding all cells (minimum two feet)
- Soil grain size and thickness (20 inches, slope <5%)
- Runoff, Overloading, Precipitation and Evaporation
- · Depth to Groundwater
- Distance from surface water features and 100year floodplain

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Groundwater monitoring wells may be required and are dependent on the location's lithology and groundwater depth.

Cells must be located at least 150 ft from surface water features and may not be located within a 100-year floodplain or wetland.

Land Apply



Land Apply

Produced Water and Gas Plant Effluent *Alternative to Discharge*

Land Apply Factors

- Treatment of the wastewater
- Waste application method (Sprinkler System)
- Waste loading rate (bbl/acre/day).
- Analysis of the wastewater

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The Application Information for a Permit to Land Apply Produced Water or Gas Plant Effluent is found on the RRC website.

Land applys are typically used as an alternative to discharges. For a land apply permit the produced water or gas plant effluent must be applied to the ground, not surface waters.

Landfarm and Landtreatment



Landfarm

Water-based drilling muds/cuttings

Landtreatment

Oil-based drilling muds/cuttings

Landfarm/Landtreatment Factors

- Thickness of waste, depth and tilling frequency
- Anticipated waste types and volumes
- Landfarms require estimated chloride concentrations

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The Application Information for Landfarm and Landtreatment Permits is found on the RRC website.

Examples of Anticipated Waste Types: Crude oil contaminated soil, pit bottoms, oil base drilling fluid and cuttings, RCRA non-exempt crude oil contaminated soil

Authorized Landfarming



Landfarming Authorized by Rule:

- Wastes disposed of on the lease where they are generated
- · Written consent of the surface owner
- Water base drilling fluids with a chloride concentration below 3000 mg/L
- Drill cuttings, sands and silts obtained while using water base drilling fluids with a chloride concentration of 3000 mg/l or less
- Wash water used for cleaning drill pipe and other equipment at the well site

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Authorized landfarming does not require a permit.

Texas Administrative Code, Title 16, Part 1, Chapter 3, Rule $\S 3.8(d)(3)(C) - Low$ Chloride Drilling Fluid

https://texreg.sos.state.tx.us/public/readtac\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=8

Authorized Fluid Recycling



Authorized Fluid Recycling

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Introduction to Authorized Recycling 😜

The Railroad Commission of Texas (RRC) encourages recycling of oil and gas waste.

- Common Waste Types for Fluid Recycling:
 - Produced Formation Fluid
 - Fracture Flow-Back Fluid
 - Completion/Workover Fluids (Used Drilling Fluids / Used Drilling Muds)

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Information may be found on the Railroad Commissions website under Notice to Operators Under the Jurisdiction of the Railroad Commission of Texas (Dec. 2014) and Memorandum of Understanding between the Railroad Commission of Texas (RRC) and the Texas Commission on Environmental Quality (TCEQ)

Authorized Fluid Recycling (1 of 2)



A permit from the RRC is Not required if:

- The fluid is treated by a lease or drilling unit operator, and the fluid is treated on an RRC Commission designated lease or drilling unit with drilling permit
- · The fluid is treated by a facility that is not subject to the jurisdiction of the RRC
 - Example: Drilling mud manufacturers subject to the jurisdiction of the TCEQ
- · The resultant treated fluid is distilled water

Statewide Rule 8 Definition of Distilled Water

Distilled water--Water that has been purified by being heated to a vapor form and then condensed into another container as liquid water that is essentially free of all solutes

Authorized Fluid Recycling (2 of 2)



Fluid Recycling Authorized By Rule

- Some recycling of fluids under the jurisdiction of RRC may be treated and reused without a permit as authorized by Statewide Rule 8 (d)(7)(B) and Chapter 4, Subchapter B §4.202(d)
 - Non-Commercial Fluid Recycling (NCFR)
 - On-Lease Commercial Fluid Recycling

There are 2 categories of fluid recycling authorized by rule, non-commercial fluid recycling and on-lease commercial fluid recycling. This means no permit is needed, but the operator must ensure all rules and regulations are followed.

Non-Commercial Fluid Recycling (1 of 3)



Non-Commercial Fluid Recycling

- Non-commercial Fluid Recycling is authorized by Statewide Rule 8 and include the recycling of fluids produced from an oil and gas well.
 - Produced Formation Fluid
 - Workover Fluid
 - Completion Fluid
 - Hydraulic Fracturing Flow-Back Fluid

Non-Commercial Fluid Recycling (2 of 3)



Non-Commercial Fluid Recycling

- Non-commercial Fluid Recycling is authorized by Statewide Rule 8 if the recycling activities are located:
 - On a Railroad Commission designated lease or drilling unit associated with a drilling permit
 - On land leased or owned by the operator for the purposes of operation of a noncommercial disposal well or a non-commercial injection well

Non-Commercial Fluid Recycling (3 of 3)



Non-Commercial Fluid Recycling

- The operator may treat the fluids or contract with a person/company for the treatment of fluids
- The operator may accept fluids from other leases and or operators.

All rules and regulations, including the definition of non-commercial fluid recycling, may be found in the Texas Administrative Code, Title 16, Part 1, Chapter 3, Rule 3.8.



Non-Commercial Fluid Recycling Pit

- Storage of fluid for Non-Commercial Fluid Recycling, or the treated recyclable fluid
- · Backfill within 120 days of cessation of use



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The rule states an on-lease pit may be utilized in conjunction with Non-commercial fluid recycling activities.

The pit must be constructed, maintained, and operated by the operator of the lease, drilling unit or non-commercial disposal or injection well.

NCFR Pit Design



Non-Commercial Fluid Recycling Pit

- Pit Design:
 - Sufficiently large and have adequate freeboard for precipitation (two feet minimum)
 - Designed to prevent stormwater from entering
 - Constructed with dikes that are structurally sound and do not seep
 - Lined with a liner that has a hydraulic conductivity 1.0 x 10 ⁻⁷ cm/s or less

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Summary of Statewide Rule 8, located on the Railroad Commission website, lists the requirements for a NCFR Pit.

https://www.rrc.texas.gov/oil-and-gas/publications-and-notices/manuals/surface-waste-management-manual/applicable-rules/summary-of-statewide-rule-8/

NCFR Pit Monitoring



Non-Commercial Fluid Recycling Pit

- Monitoring:
 - Records of monitoring must be kept to demonstrate compliance
 - Emptied and inspected at annually OR
 - Have a double liner and leak detection system that is monitored at least monthly

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The operator must ensure all monitoring records are kept for compliance.

NCFR Pit Notice



Non-Commercial Fluid Recycling Pit

- District Notification Operator must provide written notification prior to construction or, prior to use for an existing pit
 - Location of the pit with lease name and number or drilling permit number
 - -Latitude and Longitude coordinates
 - -Dimensions of the pit and maximum capacity
 - A signed statement that the operator has permission from the surface owner for construction and use of the pit

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On-Lease Fluid Recycling (1 of 2)



On-Lease Commercial Fluid Recycling

- On-Lease Commercial Fluid Recycling is authorized by Chapter 4, Subchapter B if the following are true:
 - Recycling takes place on a lease with a commercial disposal well or injection well
 - The operator of the commercial well is responsible for all activities, including the recycling, that occurs on the lease

Texas Administrative Code, Title 16, Part 1, Chapter 4, Subchapter B, Division 1, Rule 4.202

On-Lease Fluid Recycling (2 of 2) 😜



On-Lease Commercial Fluid Recycling

- Requires written notification to the RRC District Office within seven days before recycling operations begin
 - Notification must include description of fluid control and containment
- Requires written notification to the RRC District Office within seven days of operations concluding

On-Lease Fluid Recycling Pit

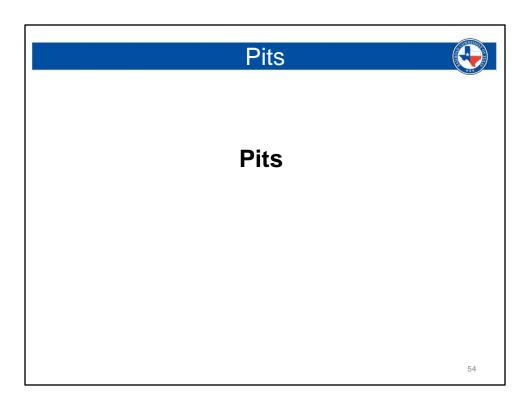


On-Lease Commercial Fluid Recycling Pit

- Any pit associated with On-Lease Commercial Fluid Recycling activities must be permitted and require financial security (Form H-11)
- If the pit is located Off-Lease, the operation is no longer authorized by rule and would require a permit (Division 5 and 6)

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Any pits associated with on lease commercial recycling operations are not authorized and will require a permit. Form H-11, commercial pit Any commercial fluid recycling taking place off-lease is also not authorized and will require a permit. Division 5 or Division 6, commercial fluid recycling



Introduction to Pits



Disposal or storage of oil and gas wastes in a pit should be allowed only if the activity does not result in the waste resources and the pollution of surface and subsurface water

Pit Categories:

- Authorized
- Non-Commercial
- Commercial

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https://www.rrc.texas.gov/oil-and-gas/applications-and-permits/environmental-permit-types/pits/

You have a Pit If...



You have a pit if...

- It's in contact with the ground but not an above ground storage tank
- · If it's below grade
- If it's a concrete structure that cannot be moved quickly and easily to check for leaks
- · If it's a steel containment ring with a liner
- If it's a "sump" larger than 500 gal

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Authorized Pits (1 of 2)



Authorized Pit Types:

- · Reserve and Mud Circulation Pit
- Completion / Workover Pit
- Basic Sediment Pit
- · Fresh Makeup Water Pit
- · Water Condensate Pit
- Non-Commercial Fluid Recycling (NCFR) Pit

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Authorized Pit definitions and requirements may be found under Statewide Rule 8.

Authorized Pits (2 of 2)



Authorized pits

- Statewide Rule 8 authorizes the use of several types of pits without a permit. Use of the pits without a permit is authorized if:
 - The pit is operated and backfilled according to the requirements in the rule, and
 - The pit does not cause pollution
- The operator must notify the appropriate RRC District Office

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Operators will need to contact the appropriate RRC District Office for authorized pit registration requirements.

Non-Commercial Pits



Non-Commercial Pit Types

- Collecting Pit
- Emergency Saltwater Storage Pit
- · Gas Plant Evaporation/Retention Pit
- Brine Pit
- Stand-alone Washout Pit
- Skimming Pit



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Non-Commercial, again also known as Private, means the waste is generated on one lease from a single operator. The operations will not take in another operator's waste.

Permitted Pit Factors



Permitted Pit Factors:

- Local hydrology and geology
- Form H-11, completed front/back
- Liners, concrete or dual lined with leak detection
- Plan View and Two perpendicular cross sections
 - Berm design
 - Minimum two feet freeboard
- Pit designed to store waste above ground level must be designed under seal of PE
- Property ownership

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Applicants must complete the form H11 front and back. All requirements on the back, items A through L, must be addressed.

Provide detailed descriptions of the liners.

Provide all required diagrams and if any of the waste will be stored above grade, the diagrams must be sealed by a Professional Engineer registered in the state of Texas.

We also require designation of the property, so if the property is not owned by the operator, then a copy of the surface lease agreement must be submitted.

Form H-11 Front
1 Office to the second
RALIROAD COMMISSION OF TEXAS PORM H-11 Of and Gas Pression Application for Receival Application for Receival Application for Receival Application for Permit to Materializa and Use a PH Compily with Instructions on Reverse Mole S. Operator's Address Street, City, State and Exp Code!
6. Name of Lease. Project or Facility of Pit Location 7. RRC Gis ID No.
0. Ptt Location
SertionBlock
10. by it betters below ground relet? 11. Name and Address of Surface Owner 1. Name and Ad
12. Are wastes or fluids from operations other than 10. Type of pit (refer to item F of instructions) your own?
Yes No. 14 a Describe land use surrounding pit location. 15. a. Briefly explain the need for this pit.
b is land normanding pit heatins productive agreement form land land? 1
18. Pix operately bounded Feet Workfall at blase Feet
20. Wastes or fluids are transported to pit by (check all that apply):
Contract United Application touck Type Other 21 a Distation the inserts water well 21 b. Depth of this water well
23. Have you included all attachments required by the instructions on the reverse side of this form?
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https://www.rrc.texas.gov/media/aaxaaokz/formh11p.pdf

The front of the application, as depicted in the slide, must be filled out completely, with accurate information, and include an original signature.

Form H-11 Back



Instructions to Pit Application Authority: Statewide Rule 8, Water Protection

- A. File the application, including all attachments, with the Railroad Commission. Oil and Gas Division, P.O. Drawer 12867, Capitol Station, Austin, Texas 78711. On the same day file one copy of the application and its attachments with the appropriate District Office. This form is not required for a minor permit.
- B. Notify the surface owner of the land where the pit will be located by mailing or delivering a copy of the application form, both front and back, but excluding the attachments if the land where the pit is proposed is within corporate limits, also notify the city clerk or other appropriate city official. If application is for renewal of an existing permit, notice is not required.
- C. Attach a plat showing the size of the lease or tract and the location of the pit within the lease or tract. Give approximate perpendicular distance to nearest intersecting lease/unit lines and section/survey/lines.To avoid confusion, distinguish between the two sets of lines. Indicate scale on this plat.
- D. Attach a county highway map (scale. I'=4 miles) showing the location of the pit. County highway maps are available from the Texas Department of Highways and Public Transportation, P. O. Box 5051. Attn: Map Distribution Fibe D-10. Austin, TX 78763.
- E. If application is for renewal of a permit for an existing pit, attach a copy of your current authority to use the pit.
- P. Identify the type of pit in Item 13 using one of the following as defined in Statewide Rule 8(a): Emergency Sallwater Storage Pit. Collecting Pit. Cass Plant Evaporation/Retention Pit. Brine Pit (located at underground hydrocarbon storage facilities only), Sallwater Disposal Pit. Salmming Pit. Washout Pit. Drilling Fluid Disposal Pit. Drilling Fluid Storage Pit. or other (specify in Item 13 and explain in Item 15a).
- G. Attach a drawing of two perpendicular, sectional views of the pit showing the pit bottom, sides, dikes and the natural grade. For an existing pit, dimensions below fluid level may be approximated if the pit length and width are irregular, include a top view to show pit dimensions and dike widths. Indicate scale on all views.
- H. If pit is lined, attach data on liner material, thickness, and installation procedures.
- I. Attach an identification and description of the soil or subsoil that will make up the pit bottom and sides. The information shall describe the soil by typical name, appropriate proportion of grain sizes, texture, consistency, moisture condition, and other pertinent characteristics. (Example: clayer silt, slightly plastic, small percentage of fine sand, firm and dry in place.) Identify the source of soil information. Information on how to classify soils is available from the District Officer or Justin Office upon request. If application is for renewal of a printing emergency saltwater storage pit or a lined pit with a leak detection system, this attachment is not required.
- J. If pit is equipped with a leak detection system, attach engineering design drawing of the pit and leak detection system.
- K. If lined pit is not equipped with a leak detection system, describe procedures for periodic maintenance and determining liner integrity, including any special monitoring.
- L. If pit is an emergency salt water storage pit, attach justification for pit size based on water production, lease water storage canacity, and anticipated well or equipment shut-down time.

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Conclusion



Questions?

Environmental Permits and Support: 512-463-3840

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There is lots of helpful information on the Railroad Commissions website under Environmental Permits:

https://www.rrc.texas.gov/oil-and-gas/applications-and-permits/environmental-permit-types/

Evaluation & Archive Video



Evaluation

 Please complete the evaluation available on the RRC website at https://survey.alchemer.com/s3/6403402/2
 021-RRC-Regulatory-Webinars-Oil-Gasand-Pipeline-Safety-Evaluation

Archive Video

 A link to the archive video of the webcast will be available on the same webpage as the presentation.